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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,398	04/27/2006	Koichi Takeda	016778-0507	1397
	7590 02/19/200 LARDNER LLP	EXAMINER		
SUITE 500	TNW	MAI, SON LUU		
3000 K STREET NW WASHINGTON, DC 20007			ART UNIT	PAPER NUMBER
			2827	
			MAIL DATE	DELIVERY MODE
			02/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/577,398	TAKEDA, KOICHI				
Office Action Summary	Examiner	Art Unit				
	Son L. Mai	2827				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 27 Ag	oril 2006 and 23 May 2006.					
/ <u> </u>	action is non-final.					
·=	<del>/ _</del>					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-48</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.	· · · · · · · · · · · · · · · · · · ·					
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-48</u> are subject to restriction and/or e	lection requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the o						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
a) ☐ All b) ☐ Some c) ☐ None of.  1. ☐ Certified copies of the priority documents have been received.						
		on No				
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
dee the attached detailed office action for a list of the certified copies not received.						
Attachmont/o						
Attachment(s)  1) Notice of References Cited (PTO-892)	1) Interview Summers	(PTO-413)				
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) U Other:						

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## **DETAILED ACTION**

1. Papers filed 04/27/06 and 05/23/06 have been received. Accordingly claims 1-48 are pending in the application.

## Election/Restrictions

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- Group I, claims 1-11, 13-27, 42-44, drawn to a memory cell as illustrated in figure 7.
- Group II, claim 12, drawn to a memory cell as illustrated in figure 11.
- Group III, claims 28-35, drawn to a layout in an L-shaped region of a memory cell as illustrated in figure 26.
- Group IV, claims 36-41, drawn to a memory cell array including memory cells inverted in three directions as illustrated in figure 31.
- Group V, claim 45, drawn to a method of performing a reading in a semiconductor memory device as illustrated in figure 8.
- Group VI, claims 46-48, drawn to a method of performing writing in a semiconductor memory device as illustrated in figure 9.
- 3. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or

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corresponding special technical features for the following reasons: Groups I and II are directed to two distinct memory cells with different structures. Group III and IV are directed to different ways of layout memory cells in memory arrays. Groups V and VI are directed to different methods of operating including reading and writing in memory devices.

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son L. Mai whose telephone number is 571-272-1786. The examiner can normally be reached on M-F from 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son L. Mai/ Primary Examiner, Art Unit 2827